

## Powertec 4G-5G LPDA Antenna, 698 to 4000 MHz

### Model Number

LLP-6940-12.N2

### Order Code

WEB-021

### Polarisation

SISO

### Design Type

Log Periodic Dipole Array

### RF Category

Cellular



The Blackhawk LPDA Antenna is one of the most popular external antenna solutions for poor 3G / 4G voice and data service. This single antenna can be used on any mobile network, in any area without worrying about compatibility. It is the ideal roof-mounted antenna for Cel-Fi repeaters.

The LPDA antenna covers all cellular bands between the 700 and 4000 MHz range with a high peak gain which projects maximum energy in the direction of the cell tower, while maintaining a wide enough beam to capture signal reflections off nearby buildings, hills, and signal scattered by trees. Multiband LTE-NR covering major bands between 698 to 2690 MHz.

A Log Periodic Dipole Antenna, or LPDA for short, is a clever antenna design that provides exceptional wideband performance by phasing a series of elements together, much like an ordinary Yagi but with each successive element of a smaller (or larger) length. The result of this clever engineering is an antenna that holds high gain, with good tuning, across the entire cellular frequency range.

- Ruggedised construction for Australian conditions
- Fully welded, powder coat aluminium design
- Stainless steel mounting clamp included
- 30 cm tail with pre-terminated N Female connector

# Antenna Technical Data

## PHYSICAL CHARACTERISTICS

Construction Material	Aluminium	RF Connections	1
Radome Colour	Black Powdercoat	Environmental Rating	No Data
Dimensions	1240 x 200 x 60 mm	Operating Temperature	-40 °C to 65 °C
Weight	2.2 kg	Mounting	Pole mount Ø 30-50 mm

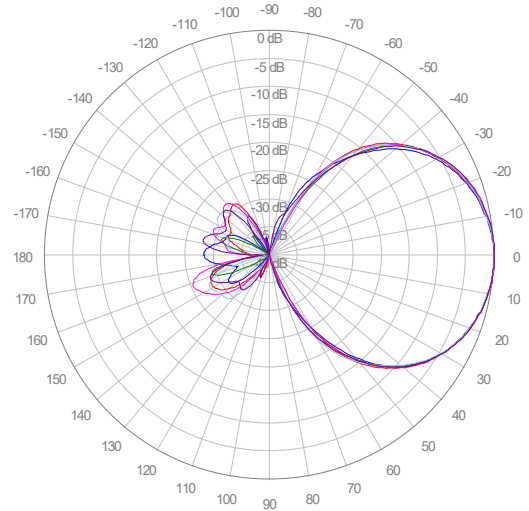
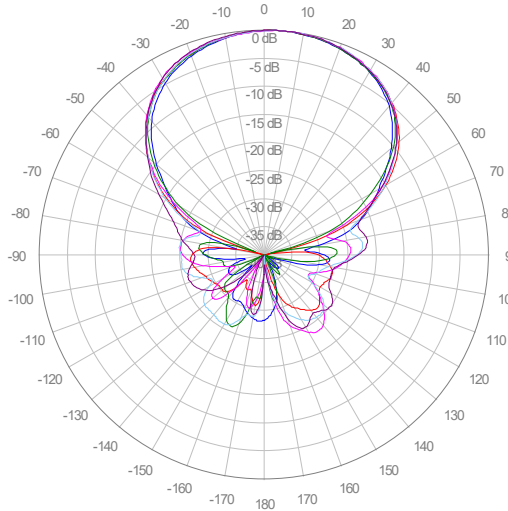
## ELECTRICAL SPECIFICATIONS

## MECHANICAL SPECIFICATIONS

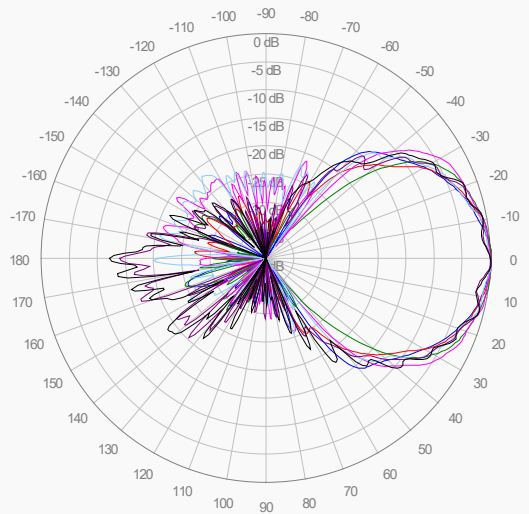
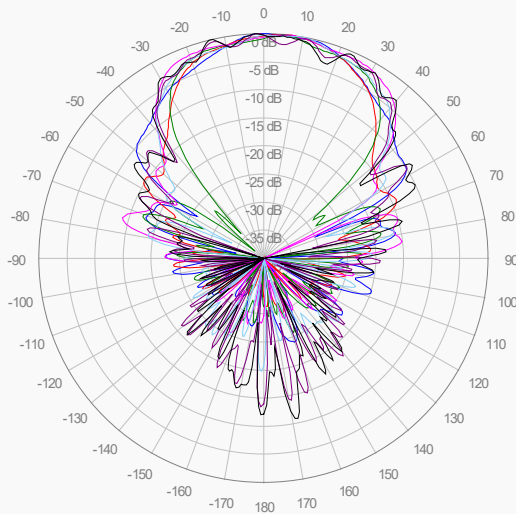
Input Impedance	50 Ω	Input Connector	N
Polarisation	Vertical (V)	Input Connector Gender	Female
Max. Input Power	50 W	Cable Series	RG-142
PIM, 3rd Order	-	Cable Length	300 mm

FREQUENCY RANGE	PEAK GAIN	VSWR	AZ.	EL.	F/B RATIO	INTER-PORT	XPI
698 to 803 MHz	11.1 dBi	< 1.8:1	60°	46°	> 28 dB		
803 to 960 MHz	11.3 dBi	< 1.8:1	60°	47°	> 26 dB		
1695 to 2200 MHz	11.5 dBi	< 1.8:1	45°	34°	> 24 dB		
2200 to 2700 MHz	10.7 dBi	< 1.8:1	50°	40°	> 13 dB		
3300 to 4000 MHz	9.5 dBi	< 1.6:1	34°	30°	> 9 dB		

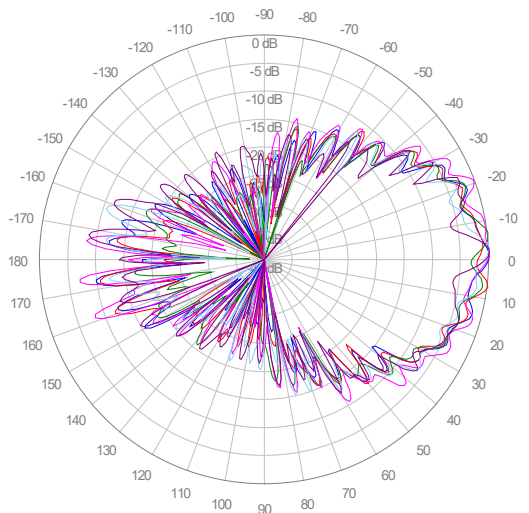
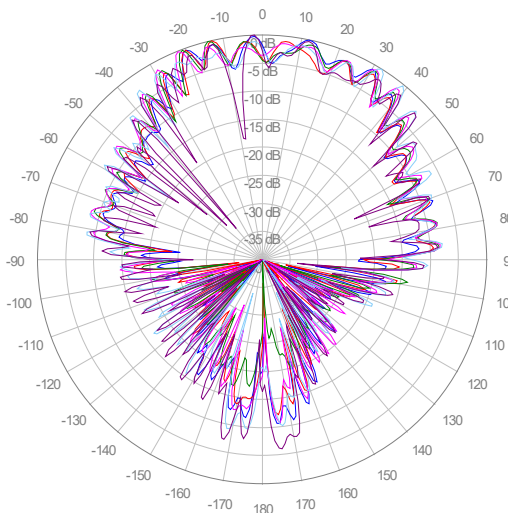
698 to 960 MHz



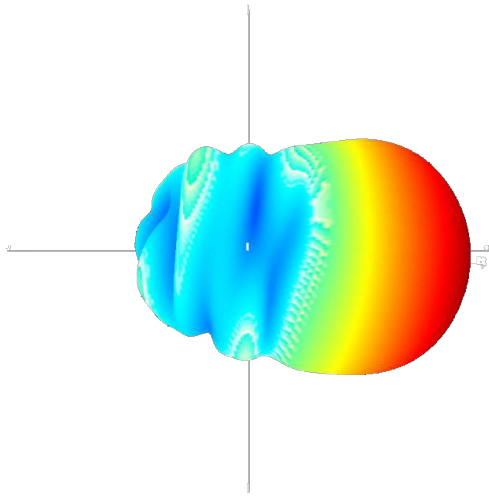
1695 to 2700 MHz



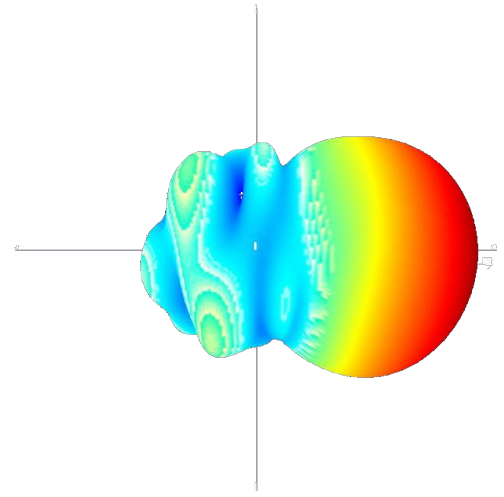
3300 to 4000 MHz



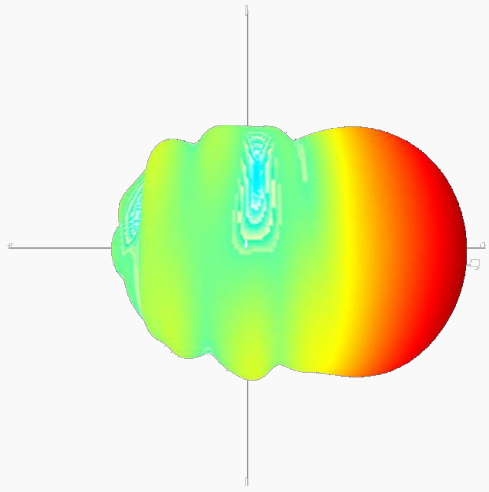
723 MHz



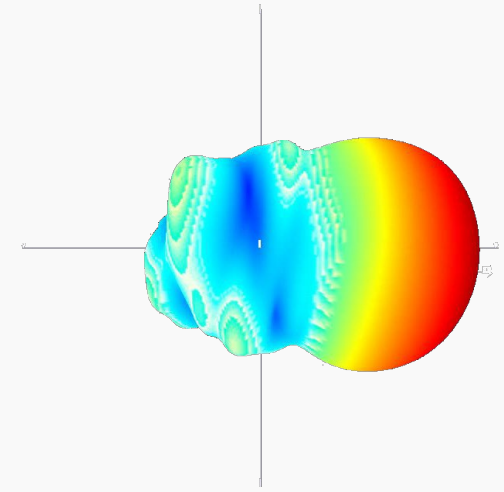
778 MHz



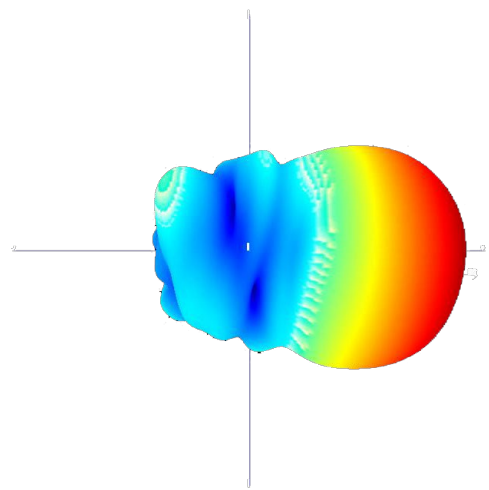
840 MHz



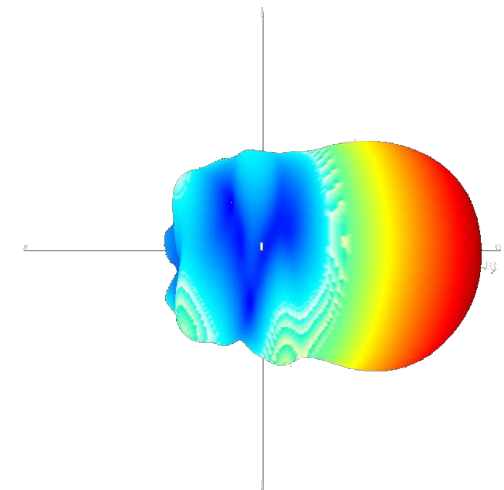
885 MHz



911 MHz

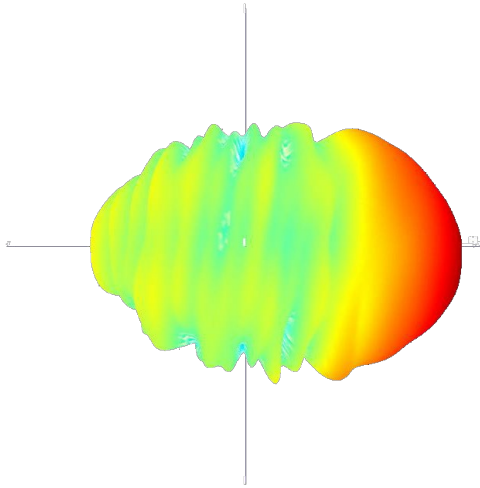


956 MHz

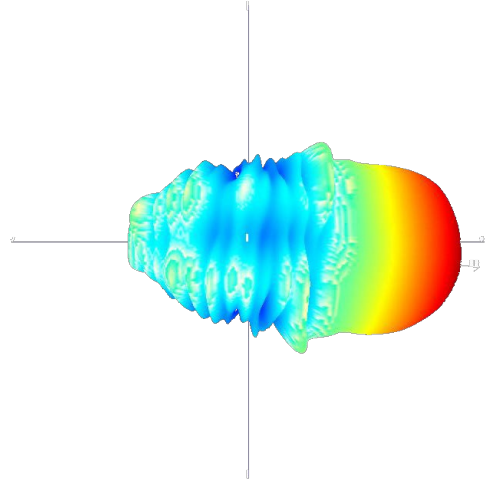


3D RADIATION PATTERNS

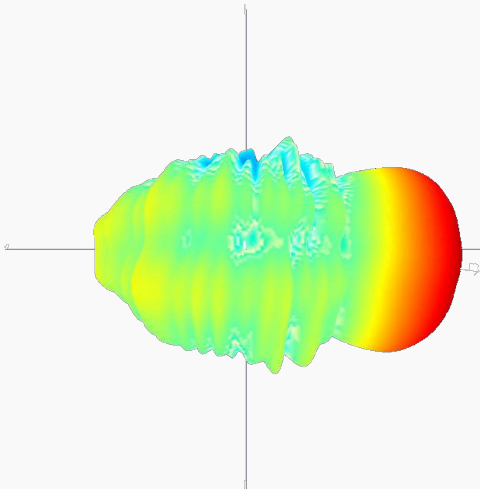
1710  
MHz



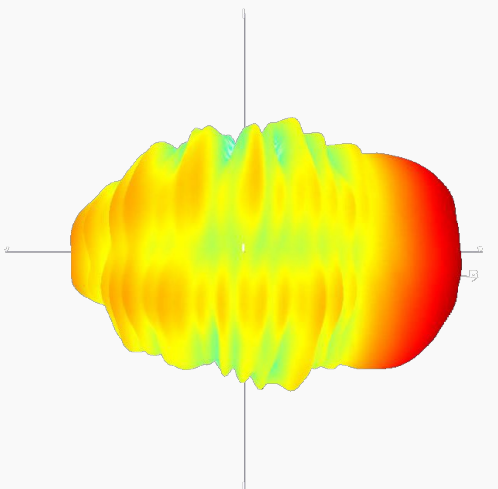
1880  
MHz



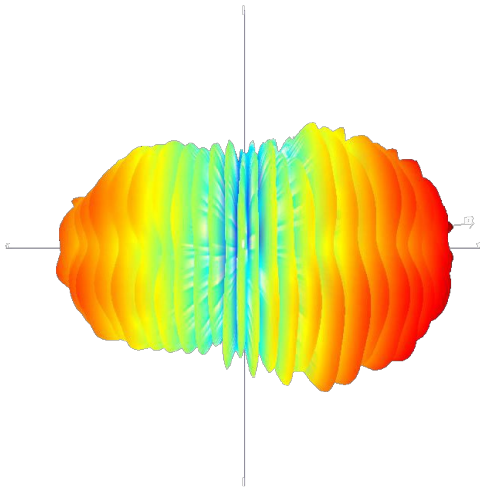
2170  
MHz



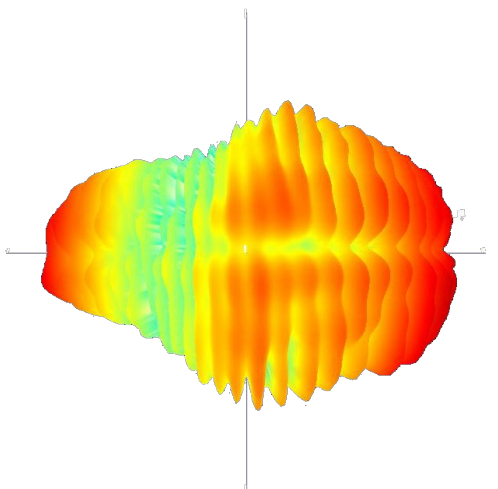
2300  
MHz



2700  
MHz



3600  
MHz



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